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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/116,124	07/15/1998	YASUTOMO NISHINA	450100-4521	2200

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NEW YORK, NY 10151

EXAMINER
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TRAN, HAI V

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 05/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/116,124	<b>Applicant(s)</b> NISHINA ET AL.	
	<b>Examiner</b> Hai Tran	<b>Art Unit</b> 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/19/2005 has been entered.

### ***Response to Arguments***

Applicant's arguments filed 04/19/2005 have been fully considered but they are not persuasive.

Applicant argues that "While Kretz does describe a format at column 4, lines 20-45, there is no disclosure or suggestion of ID information related to the cell."

In response, the Examiner respectfully disagrees with Applicant because Kretz discloses the display space is partitioning according to a hierarchical structure having at least three level (Col. 4, lines 20-45) and the main pages are linked to box via a main-box link information and boxes are linked to cells via box-cell link information and whereby each main page is associated with a main layout tag (i.e., Table\_Header) that includes both a display position for the box (Fig. 5A-E; Col. 4, lines 20-48 and Col. 58-61) and an ID of a box (i.e., item\_no) composing the page level and each box (i.e., item of the main page) is associated with a box layout tag (menu\_item of each corresponding

Art Unit: 2611

page's level) that includes both a display position for the box (Fig. 5A-E; Col. 4, lines 2042-48 and Col. 58-61) and an ID of a cell (i.e., item\_no within the Box of corresponding page level #; Col. 5, lines 65-Col. 6, lines 56; see Fig. 5D; Col. 10, lines 35-60), and each cell (item within the Box of corresponding page level #) is associated with a cell layout tag (i.e., label EVENING associated with corresponding cell) that includes an ID of a data format of the cell (i.e., item= "..."); a display position of the cell (Fig. 5E show a level 4 menu upon selecting items 119/cell, i.e., Today's evening program of Fig. 5D), and one or more IDs of information (i.e., No\_of\_attribute = ..., see Col. 11, lines 1-14) related to the cell /item 119.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-2, 4-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiga et al. (US 6005562) in view of Matthews, III et al. (US 6025837) and further in view of Kretz et al. (US 6502241).

Regarding claim 1, Shiga discloses a transmitter system for transmitting program related information (EPG data) relating to program Information (EPG)(see Fig.1)

Generating means for generating the program related (see Fig.1, "Controls Switcher 301 couples EPGs ' data received from plurality of Television stations (NHK, NTV, TBS, FUJI, TV ASAHI, TV TOKIO and WOWOW) to EPG data generating device 309") and display related information (Fig.1, "Program control device 308 couples to the EPG data generating device 309 with control data to display EPG at receivers) relating to displaying the program related information; and

Transmitting means for transmitting the program related information and the display related information separately (In Fig. 1 the "Program control device" 308 couples (control data concerning display information of EPG such as Fig.8, 9 and 10) to the "EPG data generating device" 309 and the "Program control device" 308 also controls "Switcher" 301 to couple to "EPG data generating device" 309 to generate separately EPG1, EPG2, EPG3, wherein EPG1-3 correspond to plurality of Television stations NHK, NTV, TBS, FUJI, TV ASAHI, TV TOKIO and WOWOW received at Switcher 301. EPG1, EPG2, and EPG3 transmitted along with elements 302, 303-1, 303-2..303-7 through multiplexer 304-1..304-8; thus, it's clearly that Shiga discloses separate transmission of electronic program guide data and data concerning the display of the electronic program guide.);

Generating means composing the program related information (EPG data) and the display related information (Control data) of a first part "the leading 10 bytes, the original\_network\_id(2) and last\_table\_id(1)" including identification information (last\_table\_id) for identifying the program related information and display related

information, and a second part (event descriptors loop [0..N]) composes of actual data (Col.13, lines 54-Col.14, lines 27).

Whereby the display related information (additional information) includes information for initiating an operation (Short\_event\_descriptor and Extended\_event\_descriptor; Col. 14, lines 12-18) in response to selection of a displayed item (Col. 22, lines 50-65+).

Whereby the displaying of the program related information includes partitioning a display space into boxes, partitioning each of the boxes into cells and displaying the program related information according to the boxes and cells (see Fig. 8 and 9; Col. 20, lines 13-20). As noted, Fig. 8 clearly shows the display space correspond to the window with the title "Programs to be Broadcast", within that window Shiga clearly shows two (2) boxes, i.e. 1<sup>st</sup> box has corresponding box's title "Station" and the 2<sup>nd</sup> box also has corresponding title corresponding to the time period "7:00 8:00 9:00"; Shiga further shows each of the two (2) boxes is partitioning into a plurality of cells (at least 2 cells), i.e. First (1<sup>st</sup>) Station' s Box has a plurality of cells (at least 2 cells) contain corresponding station' s name for each cell, such as CNN, MTV, Star... The 2<sup>nd</sup> box corresponds to the time period "7:00 8:00 9:00" also has a plurality of cells (at least 2 cells). Each of the cells contains corresponding TV program name, such as World News, World Sport, Money, etc...

Shiga does not clearly discloses partitioning a display space according to a hierarchical structure having at least three levels, a main page level, a box level and

Art Unit: 2611

a cell level, wherein main pages are linked to box via a main-box link information and boxes are linked to cells via box-cell link information.

Matthews discloses partitioning a display space according to a structure having at least three blocks/objects (Fig. 5), a main page object 110, a box object 114, 116, 120 and a cell object (i.e., time panel 116 (Box) with corresponding time cells; Col. 9, lines 1-55), wherein main pages are linked to box via a main-box link information and boxes are linked to cells via box-cell link information according to the well known GUI interface windowing environment of Microsoft Windows or IBM OS/2 environment as disclosed (Col. 8, lines 41-51). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shiga with the teaching of Matthews so to provide to user a friendly GUI interface/display space well defined with pages, boxes and cells that all link to each other so that user could navigate with ease as intended in the windows environment.

Shiga in view of Matthews does not clearly discloses the display space is partitioning according to a hierarchical structure having at least three level and the main pages are linked to box via a main-box link information and boxes are linked to cells via box-cell link information; and whereby each main page is associated with a main layout tag that includes an ID of a box composing the page and each box is associated with a box layout tag that includes an ID of a cell composing the box.

Kretz discloses the display space is partitioning according to a hierarchical structure having at least three level (Col. 4, lines 20-45) and the main pages are linked to box via a main-box link information and boxes are linked to cells via box-

Art Unit: 2611

cell link information and whereby each main page is associated with a main layout tag (i.e., Table\_Header) that includes a display position for both the box (Fig. 5A-E; Col. 4, lines 20-48 and Col. 58-61) and an ID of a box (i.e., item\_no within the main menu/page at level 0) composing the page and each box (i.e., item within main page level 0) is associated with a box layout tag (menu\_item) that includes both a display position for the box (Fig. 5A-E; Col. 4, lines 2042-48 and Col. 58-61) and an ID of a cell (i.e., item\_no within the Box of corresponding page level 1 or 2; Col. 5, lines 65-Col. 6, lines 56; see Fig. 5D; Col. 10, lines 35-60), and each cell (item within the Box of corresponding page level # 1 or 2) is associated with a cell layout tag (i.e., label "EVENING" associated with corresponding cell) that includes an ID of a data format of the cell (i.e., item= "..."); a display position of the cell (Fig. 5E show a level 4 menu upon selecting items 119/cell, i.e., Today's evening program of Fig. 5D), and one or more IDs of information (i.e., No\_of\_attribute = ..., see Col. 11, lines 1-14) related to the cell /item 119.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shiga and Matthews with the teaching of Kretz so a large amount of local processing power can be dispense within the receiver. Moreover, the transmitter now needs to include in the transmitted menu (EPG) structure only a search criterion (i.e., the category "news"), and the receiver autonomously display in response thereto all information items matching the criterion (Col. 1, lines 55-Col. 2, lines 15).



Regarding claim 2, Shiga further discloses each "event descriptors loop" corresponds to a part claimed in which corresponds to the same data structure of each event (see claim 1 analysis).

Regarding claims 4, 5, 6, 7 and 12, as analyzed with respect to claim 1, Shiga further discloses a receiver for recovering the program and EPG data transmitted over the broadcast channel to which a tuner is tuned.

Although not specifically disclosing the receiver for separately receiving the program related information and display related information relating to displaying the program related information; generating fourth information for displaying the program related information based on the program related information and the display related information; First separating the program related and the display related information into a first part containing identification for identifying the program related information and the display related information, and a second part composed of actual data; second separating the second part into a third part comprising identification information for identifying the second part and a fourth part composed of actual data; retrieving data of the second part and the fourth part of the program related information and the display related information based on the identification information; Updating the second part and the fourth part of the program related information and the display related information based on the identification information; Display control means for displaying a first window on a predetermined screen and displaying data of fourth part within the first windows as claimed in claim 4-7.

Shiga receiver (Fig.23) must identify separately each stream of data so the receiver could recover the program and EPG data transmitted, as disclosed in which the MPEG streams are received and separated by the de-multiplexer 24, stored in corresponding memory buffer of the receiver so that the CPU of the receiver could read out from the buffer memory the corresponding video and audio data and process them along with any control information received by users to display EPG and information on the appropriate location of the TV display as shown in Fig. 7, 8, 9 and 10 (also see Col. 21, lines 60 - Col. 23, lines 3). Clearly the MPEG stream would have information concerning the layout of the EPG received therein (Col. 20, lines 8-20), thus meeting the limitation of claims 4-7 and 12. Shiva further discloses whereby the display related information (additional information) includes information for initiating an operation (Col. 14, lines 12-18) in response to selection of a displayed item (Col. 22, lines 50-65+).

Whereby the displaying of the program related information includes partitioning a display space into at least two boxes, partitioning each of the boxes into at least two cells and displaying the program related information according to the boxes and cells (see Fig. 8 and 9; Col. 20, lines 13-20). As noted, Fig. 8 clearly shows the display space correspond to the window with the title "Programs to be Broadcast", within that window Shiga clearly shows two (2) boxes, i.e. 1<sup>st</sup> box has corresponding box's title "Station" and the 2<sup>nd</sup> box also has corresponding box's title of time period "7:00 8:00 9:00"; Shiga further shows each of the two (2) boxes is partitioning into a plurality of cells (at least 2 cells), i.e. First (1<sup>st</sup>) Station's Box has a

Art Unit: 2611

plurality of cells (at least 2 cells) contain corresponding station's name for each cell, such as CNN, MTV, Star... The 2<sup>nd</sup> the time period "7:00 8:00 9:00" Box also has a plurality of cells (at least 2 cells) contain corresponding TV program displays in each of the cells, such as World News, World Sport, Money, etc...

Regarding method claim 8, see analysis of apparatus claim 1-2.

Regarding method claims 9 and 13 see analysis of apparatus claims 4-7 and 12.

Regarding claims 10-11 and 14, see analysis of claims 1-2.

Regarding claim 15, Shiga further discloses wherein the first window is composed of one or more boxes (Fig. 5, 6, 7, 8, 9 and 10) (Col. 9, lines 3-47).

### ***Conclusion***

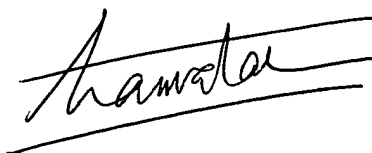
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Tran whose telephone number is (571) 272-7305. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher C. Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HT:ht  
04/28/2005

A handwritten signature in black ink, appearing to read 'Hai Tran', is written over three horizontal lines.

**HAI TRAN  
PRIMARY EXAMINER**